

Standard Operating Procedure for Central Instrumentation Facility of ICAR IISS Bhopal

The Central Instrumentation Facility (CIF) is established to provide access to sophisticated analytical instruments for research, teaching, and extension activities. The facility ensures efficient utilization, proper maintenance, and transparent operation of all equipment through standardized procedures.

1. Booking Procedure

Users submit a requisition/indent form specifying the instrument, purpose of analysis, sample details, and preferred date.

Bookings are entered in the Booking Register (physical/digital) on a first-come, first-served basis, with priority accorded to time-bound institutional research and emergency requirements.

External users submit a formal request along with institutional approval and agree to the prescribed user charges.

2. Sample Submission and Indent Form

Samples are submitted with a duly completed Indent Form containing:

Name and designation of user

Department/Institute

Instrument required

Sample description and number of samples

Parameters to be analyzed

Expected date of analysis

Signature of the user and approval of the Head of Division/Competent Authority

Samples are verified by the technical staff before acceptance.

3. Logbooks and Instrument Operation

Each instrument is provided with a dedicated Logbook maintained by the technical personnel.

The logbook records:

Date and time of operation

User details

Sample identification

Instrument operating conditions

Calibration records

Preventive maintenance

Observations and remarks

Only trained and authorized personnel are permitted to operate the instruments.

4. Technical Personnel

Each instrument is assigned to a designated Technical Officer/Technical Assistant/Scientist responsible for:

Sample receipt and scheduling

Instrument operation

Calibration and quality assurance

Routine maintenance

Maintaining records and logbooks

Coordinating Annual Maintenance Contract (AMC)/service engineers

5. Breakdown Register and Maintenance

A separate Breakdown Register is maintained for each instrument documenting:

Date of malfunction
Nature of fault
Downtime
Service request details
Corrective action taken
Date of restoration and certification of satisfactory functioning
Preventive maintenance schedules are followed as per manufacturer recommendations.

6. Result Submission Register

After completion of analysis, results are reviewed by the concerned scientist/technical officer.
Results are entered in the Result Submission Register indicating:

User name
Sample number
Date of analysis
Date of report submission
Mode of submission (hard copy/e-mail)
User acknowledgement

7. Procedure for External Users

External users submit a formal request through their institution.
Samples are accepted subject to instrument availability.
User charges are collected as per approved institutional rates.
Results are issued after completion of analysis and payment formalities.
Confidentiality of analytical data is maintained.

8. Record Keeping and Safety

All booking registers, indent forms, logbooks, maintenance records, and result registers are preserved for audit and quality assurance.
Standard laboratory safety protocols, instrument-specific SOPs, calibration schedules, and waste disposal guidelines are strictly followed to ensure safe and reliable operation.

Documents/Maintained Registers in the CIF

Booking Register
User Indent Form
Sample Receipt Register
Instrument Logbook
Calibration & Maintenance Log
Breakdown Register
Result Submission Register
External User Register
AMC/Service Record File
Consumables Inventory Register

The lab is NABL accredited since 13 Dec 2025 for 21 soil testing parameters.

**I/c PME Cell
ICAR-IISS Bhopal**